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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/788,526  | 02/27/2004  | Neil J. Goldfine     | 1884.2005-003       | 6893             |
| 21005   | 7590        | 05/31/2005           | EXAMINER            |                  |
| HAMILTON, BROOK, SMITH & REYNOLDS, P.C.<br>530 VIRGINIA ROAD<br>P.O. BOX 9133<br>CONCORD, MA 01742-9133 |             |                      | AURORA, REENA       |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2862                |                  |

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/788,526

Applicant(s)

GOLDFINE ET AL.

Examiner

Reena Aurora

Art Unit

2862

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 February 2004 and 24 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 - 25 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-3, 6-8, 10, 11 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

  
**Bot Ledynh**  
**Primary Examiner**

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 3/24/05.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Applicant should update on page 1, Related Applications section since the divisional 10/046,925 is now US 6727691.

1. This application is in condition for allowance except for the following formal matters:

#### ***Claim Objections***

2. Claim 1 is objected to because of the following informalities:

What is the material to which the time varying electric current is being passed?

The phrase "the test material" lacks antecedent basis.

What is the test material?

Appropriate correction is required.

Claim 2 is objected to because of the following informalities: the phrase "the seam" lacks antecedent basis. Appropriate correction is required.

Claim 3 is objected to because of the following informalities: the phrase "the seam axis" lacks antecedent basis. Appropriate correction is required.

Claims 6 and 7 are objected to because of the following informalities: the phrase "the anvil" lacks antecedent basis. Appropriate correction is required.

Claim 8 is objected to because of the following informalities: the phrase "the welding tool" lacks antecedent basis. Appropriate correction is required.

Claim 10 is objected to because of the following informalities: the phrase "the front surface of the test material" lacks antecedent basis. Appropriate correction is required.

Claim 11 is objected to because of the following informalities: the phrase "the back surface of the test material" lacks antecedent basis. Appropriate correction is required.

Claim 25 is objected to because of the following informalities: the phrase "the heat affected zone" lacks antecedent basis. Appropriate correction is required.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

***Allowable Subject Matter***

3. The following is a statement of reasons for the indication of allowable subject matter: As to claims 1 – 25, the prior art fails to show a method for joining process quality control wherein a feature of the electrical property which is measured from the test material with the sensor is used to control the joining process. This feature taken together with the other limitations of the claim renders the claims allowable over prior art.

**Prior Art of Record**

Goldfine et al. (5,629,621) is cited for its disclosure of an apparatus and method for obtaining increased sensitivity in property measurement using magnetometers.

Danielson (5,541,510) is cited for its disclosure of multi-parameter eddy current measuring system with parameter compensation technical field.

Hollis et al. (5,434,504) is cited for its disclosure of position sensors for linear motors including plural symmetrical fluxes generated by a planer drive coil and received by planer sense coils being collinear along an axis of motion.

Hedengren (5,237,271) is cited for its disclosure of an apparatus and method for non-destructive testing using multi-frequency eddy currents.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2862

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Reena Aurora



Bot Ledyh  
Primary Examiner